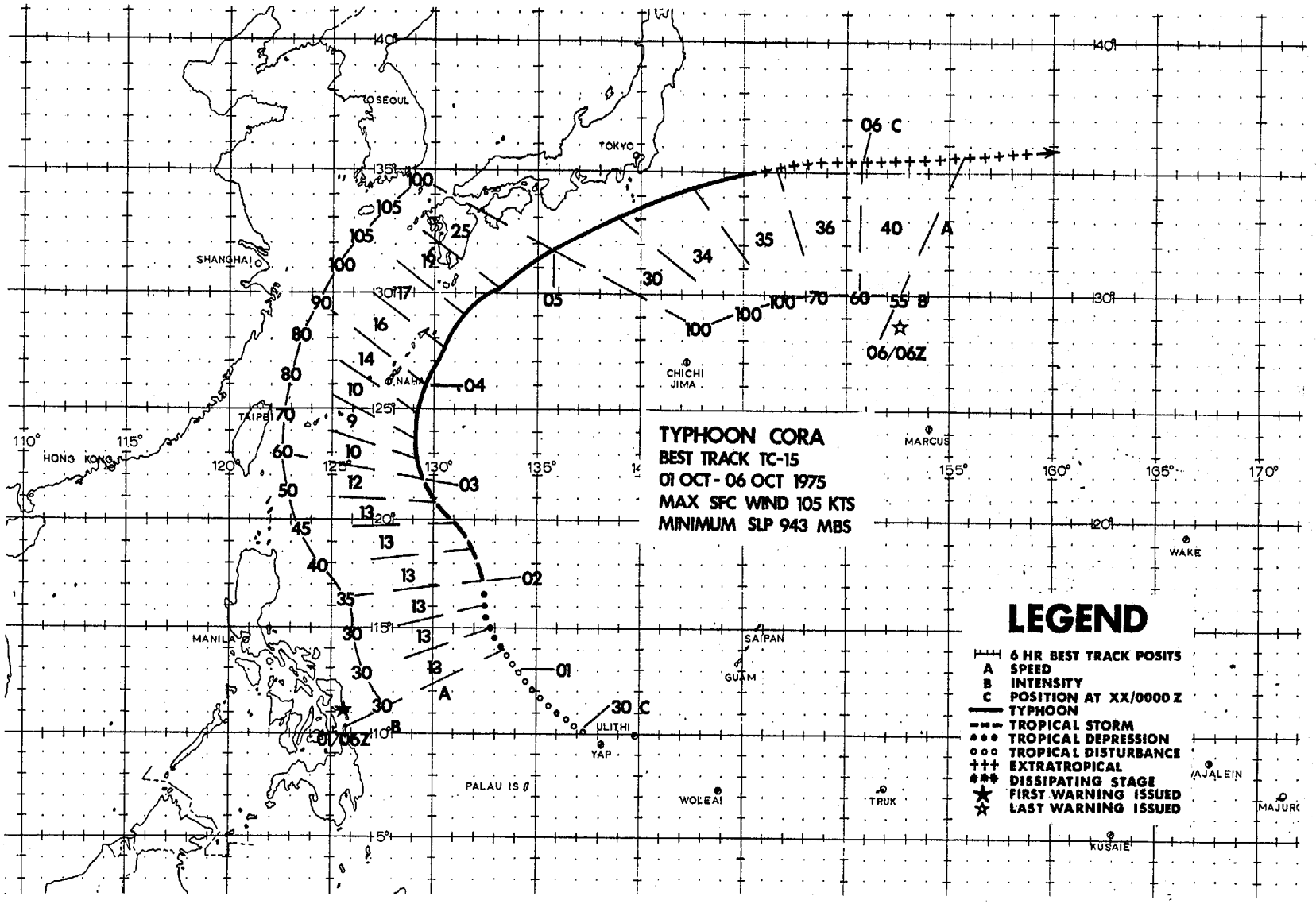
TYPHOON CORA
BEST TRACK TC-15
01 OCT - 06 OCT 1975
MAX SFC WIND 105 KTS
MINIMUM SLP 943 MBS
LEGEND
6 HR BEST TRACK POSITS
A SPEED
B INTENSITY
C POSITION AT XX/0000 Z
TYPHOON
TROPICAL STORM
TROPICAL DEPRESSION
TROPICAL DISTURBANCE
EXTRATROPICAL
DISSIPATING STAGE
FIRST WARNING ISSUED
LAST WARNING ISSUED
06 C
06/06Z
01/06Z
TOKYO
SEOUL
SHANGHAI
TAIPEI
HONG KONG
MANILA
CHICHI JIMA
MARCUS
WAKE
SAIPAN
GUAM
YAP
ULITHI
WOLEAI
TRUK
PALAU IS
KUSAIE
MAJURO
110°
115°
120°
125°
130°
135°
140°
155°
160°
165°
170°
40°
35°
30°
25°
20°
15°
10°
5°

Weak troughing in the low level easterlies spawned a disturbance near 10N 142E on the morning of 29 September, as indicated by satellite and synoptic data. This disturbance drifted west-northwest for the next several days; on 1 October, aircraft reconnaissance reported surface winds of 30 kt.

For the next 24 hr, the 700 mb center was displaced as much as 25 nm to the northwest of the large and diffuse surface center. This center had a diameter as large as 80 nm with weak temperature and pressure gradients, and correspondingly light winds. From initial detection until the evening of the 3rd, development of a good outflow channel to the west and northwest was restricted by an upper tropospheric trough to the west. Despite this lack of outflow, the storm continued to develop. Cora was upgraded to typhoon strength on the 3rd when aircraft reconnaissance reported 70 kt surface winds and a closed wall cloud. The system continued to lack good vertical structure through the evening of the 3rd when the 700 mb center was still displaced east of the surface center.

For the first 48 hr, Cora was situated between two large high pressure cells and moved toward the northwest at 13 kt. On the 3rd, the high pressure cell north of Taiwan began to weaken rapidly and collapsed. Strong ridging was now building to the east of Cora. At this time (Fig. 4-18), Cora began to slow down prior to a gradual recurvature near 25N.

As Cora passed 100 nm to the east of Okinawa on the morning of the 4th, Kadena AB recorded a peak gust of 31 kt. The system now began a gradual acceleration as it entered an area of strong westerlies to the northeast of the high pressure cell. That evening Cora attained a minimum central pressure of 943 mb and maximum sustained surface winds of 105 kt (Fig. 4-19). Both satellite and synoptic data indicated excellent outflow in all quadrants except the northwest where a minor trough was still restricting the outflow.

By the morning of the 5th, satellite and synoptic data indicated that the primary upper-level outflow was now confined to the north-northeast. Although Cora was in an area of strong vertical shear, typhoon strength winds were still maintained for the next 24 hr. Moving to the northeast at 30 kt, the typhoon continued to come into increasingly strong westerly steering flow. Cora passed 120 nm south-southeast of Tokyo on the evening of the 5th.

Satellite data on the 6th indicated that there was very little upper-level outflow, but an apparent low-level circulation was still visible. The remains of Cora were now moving to the east at 40 kt as an extratropical system with surface winds of 55 kt.

FIGURE 4-18. *Cora just prior to attaining typhoon intensity 255 nm south-southeast of Okinawa, 3 October 1975, 0254Z. [DMSP imagery]*

FIGURE 4-19. *Typhoon Cora near 95 kt 115 nm east of Kadena AB, Okinawa, 4 October 1975, 0236Z. [DMSP imagery]*